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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/689,125 | 10/17/2003 | Sung-Tsun Tsai | PUSA030922 | 2915 |

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EXAMINER

ABRAHAM, TANIA

ART UNIT PAPER NUMBER

3636

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/689,125 | Applicant(s) TSAI, SUNG-TSUN | |
| | Examiner Tania Abraham | Art Unit 3636 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15, 16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 6-14 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 1-20 are objected to because of the following issue:

While the claims recite various structural components, they fail to set forth the function and purpose of such components in a manner to sufficiently define the invention. For example:

- In Claim 1, there is no declaration as to the function and/or purpose of the adjusting rod, the fixing holes, and the relationship there between. Also not stated is what effect such a relationship has on the chair as a whole, in terms of the backrest tilting to various use positions.
- Also, in Claim 17 the “inclined state” of the support rack has not been sufficiently defined (in terms of the effect on the backrest and its position relative to the seat) to demonstrate the alternative use of the chair wherein an occupant’s knees may rest on the backrest.

Summarily, the primary objective of the invention, wherein the backrest is moved rearward and downwardly such that an occupant’s knees may rest thereon for alternate use of the chair, has not been set forth in the claims in such a manner to clearly and positively define the applicant’s invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 15, 16, 19, and 20 are rejected under 35 U.S.C. 102b as being anticipated by Egert et al. [US 4,4045,082]. Egert (figures 1-2) discloses structure as claimed, including:

- A support frame 11 attached to a base, having a slide slot 16 with fixing holes and an arcuate recess 14, and
- A backrest support 21 mounted on the support frame and having a first section with an adjusting rod 15, for sliding within slot 16 and a fixing rod 23, which is detachably locked in recess 14.

With respect to Claim 2, it is observed that arcuate end 30 gives the backrest support 21 a substantial L-shape. Regarding Claims 15 and 16, the upright and horizontal states of the backrest disclosed by Egert is achieved by, respectively:

- Locking the adjusting rod in the front most fixing hole (see col. 2, lines 22-24), and
- Lifting and sliding the backrest along the slide slot such that the fixing rod is moved out of the recess and the backrest is allowed to fold over (see col. 3, lines 20-36).

Concerning Claim 19, Egert discloses the means of achieving various angles of inclination by repositioning the adjusting rod within the slide slot to different fixing holes (see col. 1, lines 44-46). Finally, pertaining to Claim 20, the location of the adjusting rod and the fixing rod is disclosed by Egert to be on the lower end of the backrest support

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and on a mediate portion of the backrest support, respectively. (See col. 2, lines 51-55 and Fig. 2.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egert in view of Liu [US 6,394,550 B1]. Egert discloses everything previously mentioned as well as a backrest mounted on the backrest support. However, Egert does not teach a seat support rack and its structure, or a control device to adjust seat inclination. Liu does teach a chair adjustment assembly, that is applicable to various chair assemblies (see col. 2, lines 57-60), having the following:

- A seat support rack 1 having a pivot base on its bottom side for connection to pivot holes on a mediate portion of a support frame 2 (see Fig. 1) in order to pivotally mount the rack to the support frame,

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- A control device 3 mounted between a support frame and a seat support rack (see Fig. 1 and 3, col. 2 – lines 47-50), to provide for adjustment of the seat's inclination, and
- A seat 101 mounted on the seat support rack.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the seat assembly of Egert to include a pivoting seat support rack with a seat mounted on top and a control device in view of the teachings of Liu in order to provide a tilting seat for enhancing the comfort of an occupant.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Egert in view of Yang [US 5,617,934]. Egert discloses everything previously mentioned, but does not teach braking wheels mounted on the base. Yang does teach wheels with a braking mechanism mounted on a chair for stopping wheels entirely and stably. Yang also teaches that the braking mechanism of the wheels is controlled by the user's weight and does not require manual operation (see col.1, lines 49-56). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the base of Egert to include braking wheels in view of the teaching of Yang in order to entirely control the movement of wheels mounted on a chair for prohibiting unwanted motion of the chair.

Allowable Subject Matter

8. Claims 6-14 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kvalheim discloses a chair convertible from conventional seating position to knee rest position having an inclining backrest and a tilting seat.
- Liu discloses an adjusting mechanism for a chair that adjusts the inclined angle of a seat.
- Daniels discloses a castor wheel arranged to be braked in response to the application of a load applied to the castor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania Abraham whose telephone number is 571-272-2635. The examiner can normally be reached on Monday - Friday, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PETER R. BROWN
PRIMARY EXAMINER